

Off-grid inverter



Introduction:

ESI-3KVA series inverter adopts digital intelligent control and complete high-frequency topology featuring stable performance and excellent resistance to jam. Its output voltage is 110V/60HZ, 220V/50HZ and rated power is 3KVA. This product is widely used in these solar system for telecommunication, traffic, house, island, border defense, countryside, pastoral areas etc.

Performance:

1. Output pure sine wave , small waveform distortion rate.
2. Soft start function and high efficiency.
3. Strong load adaptability and stability.
4. Internal fuse against wrong connection for reliability and safety.
5. Protection against overcurrent and short-circuit, preventing product from burning.
6. Low voltage protection for battery input, preventing battery from over-discharging.
7. Input side DC and output side AC isolated against electric shock for more safety.
8. All-round protection and alarm function.
9. Complete high-frequency transform, small volume, light weight.
10. Main phase locked, bypass switch and on-grid are available (compatible UPS function).

Data sheet:

| Model | 3000VA off-grid inverter | | |
|--------|--------------------------|-----------------|-----------------|
| Series | EISH-24-110-3KW | EISH-36-110-3KW | EISH-48-110-3KW |
| | EISH-24-220-3KW | EISH-36-220-1KW | EISH-48-220-3KW |

| Input | | 24VDC | 36VDC | 48VDC |
|-------|--------------------------|--------------|--------------|--------------|
| | Work voltage range | 20~30VDC | 32~42VDC | 40~60VDC |
| | No-load input current | ≦ 1.0A | ≦ 1.0A | ≦ 1.0A |
| | Low voltage alarm range | 20.5~21.5VDC | 30.5~31.5VDC | 40.5~42.5VDC |
| | Low voltage close range | 19.5~20.5VDC | 29.5~30.5VDC | 39~41VDC |
| | High-voltage close range | 29.5~31VDC | 41.5~42.5VDC | 59~62VDC |

| Output protection | | 110VAC/60HZ | 220VAC/50HZ | |
|-----------------------|--------------------------------------|---|---|-------|
| | Rated power | 3KVA | 3KVA | |
| | Momentary power | 6KVA | 6KVA | |
| | Output waveform | Pure sine wave | Pure sine wave | |
| | Distortion rate | ≦ 3% | ≦ 3% | |
| | Output voltage range | 110~120VAC | 220~240VAC | |
| | Output frequency range | 59.5~60.5HZ | 49.5~50.5HZ | |
| | Input stage reverse | FUSE | FUSE | |
| | Output stage short circuit | YES | YES | |
| | Output overload range | 110%~120% of rated power | 110%~120% of rated power | |
| | Product over temperature | 75~85℃ | 75~85℃ | |
| Others | Input and output grade | Completely isolated | Completely isolated | |
| | Dielectric strength | Input to output stage: 1.2KV/5mA 60S | Input to output stage: 1.2KV/5mA 60S | |
| | | Output to shell: 1.2KV/5mA 60S | Output to shell: 1.2KV/5mA 60S | |
| | Full load work efficiency | ≧ 90% | ≧ 91% | ≧ 92% |
| | Working temperature of whole machine | Lower than environmental temperature +40℃ | Lower than environmental temperature +40℃ | |
| | Display mode | LCD display | LCD display | |
| | On/off mode | Button/Manual switch (optional) | Button/Manual switch (optional) | |
| Cooling mode | Automatic thermostat fan cooling | Automatic thermostat fan cooling | | |
| Environment | Work temperature | -10~+50℃ | | |
| Standard Comm. method | | RS485 | RS485 | |
| EMC | | EN61000-3-2, EN50081 | EN61000-3-2, EN50081 | |

| | | |
|-------------------|------|------|
| Protection degree | IP20 | IP20 |
|-------------------|------|------|